



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/817,527 | 04/01/2004 | Daniel Krahmer | 17979-006002 | 4867 |

26161 7590 01/05/2005

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

| |
|----------|
| EXAMINER |
|----------|

JUBA JR, JOHN

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2872

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,527

Applicant(s)

KRAHMER ET AL.

Examiner

John Juba, Jr.

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-83 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 – 56 and 82, drawn to an optical objective and method of making, the objective having crystallographically oriented lenses, classified in class 359, subclass 497.
- II. Claims 65 – 71, 77 – 81, and 83, drawn to an optical objective with phase compensation coating and method of making, classified in class 359, subclass 499.
- III. Claims 57 – 64, and 72 - 76, drawn to an optical objective having crystallographically oriented lenses combined with a compensation coating, classified in class 359, subclass 499.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as in a crystallographic lens system wherein acceptable phase compensation is achievable by clocking the lenses alone, and thus wherein the expense of coating a lens can be avoided, and invention II has separate utility such as in compensating birefringent lens systems wherein the crystallographic orientation of the individual lens elements is not manipulated or is simply unknown. See MPEP § 806.05(d).

Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does

Art Unit: 2872

not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claim 83 evidences that the compensation coating on crystalline lenses is regarded as separately patentable without the lens crystallographic orientation further recited in the combination. The subcombination has separate utility such as in a crystallographic lens system wherein acceptable phase compensation is achievable by clocking the lenses alone, and thus wherein the expense of coating a lens can be avoided.

Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claim 18 evidences that the relative rotation of crystalline lens elements to reduce variations in optical path length differences is regarded as separately patentable without the use of the compensating coating further recited in the combination. The subcombination has separate utility such as in compensating birefringent lens systems wherein the crystallographic orientation of the individual lens elements is not manipulated or is simply unknown.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and

Art Unit: 2872

because the search for groups I and III is not required for group restriction for group II, examination purposes as indicated is proper.

It is noted that group I contains claims directed to the following patentably distinct species of the claimed invention:

Species a – lens optical axes oriented parallel to the $\langle 111 \rangle$ direction or equivalently, to which claims 1 – 8, 20, 36, and 45 appear to be directed;

Species b – lens optical axes oriented parallel to the $\langle 100 \rangle$ direction or equivalently, to which claims 9 – 16, 21, 37, and 46 appear to be directed;

Species c – lens optical axes oriented parallel to the $\langle 110 \rangle$ direction or equivalently, to which claims 22, 38, and 47 appear to be directed;

Species d – lenses with their optical axes oriented parallel to a specific crystallographic direction in combination with lenses having optical axes parallel to a different crystallographic direction, to which claims 17, 25 – 27, 40 – 42, 49 – 51, 55, and 56 appear to be directed

Should Applicants elect group I for examination, Applicants are required under 35 U.S.C. 121 further to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 18 is generic to the optical objectives (article claims) recited in species a - d.

Art Unit: 2872

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Due to the complexity of the election requirement, the customary telephone call requesting an oral election was not made.

Art Unit: 2872

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Juba whose telephone number is (571) 272-2314.

The examiner can normally be reached on Mon.-Fri. 9 - 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Drew Dunn whose number is (571) 272-2312 and who can be reached on Mon.- Thu., 9 - 5.

The centralized fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for *all* communications.


JOHN JUBA, JR.
PRIMARY EXAMINER
Art Unit 2872

January 3, 2005